AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) An apparatus, comprising:

    a processor to execute a plurality of threads simultaneously, each thread including

        a series of instructions;

    an event detector to detect a predetermined list of events and to transmit an event

        detection signal to a multiplexer; ~~and~~

    an event ~~selection control~~ register ~~(ESCR)~~ to instruct the multiplexer to select an

        event from the predetermined list of events by filtering those events that

        are not to be counted and by qualifying the event that is to be counted

        based on a set of conditions, wherein the qualifying of the event is

        performed using a thread ID and a thread current privilege level (CPL),

        the thread ID indicating a source of the event, the source including a

        thread of the plurality of threads where the event occurred~~.~~; and

    an event counter to count the qualified event.

2.   (Cancelled)

3.   (Currently Amended) The apparatus of claim ~~2,~~ 1, wherein the ~~ESCR~~ event

    register comprises a first field of bits to choose the event to be counted.

4.   (Currently Amended) The apparatus of claim ~~3,~~ 1, wherein the ~~ESCR~~ event

    register further comprises a second field of bits to choose the event to be masked

    and not counted.

Claims 5-6 (Cancelled)

7.   (Previously Presented) The apparatus of claim 1, wherein the event counter is

        stopped and cleared before a new event is selected.

8.   (Previously Presented) The apparatus of claim 7, wherein the event counter is

        preset to a certain state.

9.   (Previously Presented) The apparatus of claim 1, wherein the predetermined list

        of events includes hardware performance and breakpoint events.

Claims 10-17 (Cancelled)

18.   (Currently Amended) A method, comprising:

        executing a plurality of threads simultaneously, each thread including a series of

            instructions;

        detecting a predetermined list of events and transmitting an event detection signal

            to a multiplexer;

        instructing the multiplexer to select an event from the predetermined list of events

                by filtering those events that are not to be counted and by qualifying the

                event that is to be counted based on a set of conditions, wherein the

                qualifying of the event is performed using a thread ID and a thread CPL,

                the thread ID indicating a source of the event, the source including a

                thread of the plurality of threads where the event occurred;

        counting the event qualified by the multiplexer using an event counter; and

        accessing the event counter to determine a current count of the event.

19.   (Cancelled)

20.   (Previously Presented) The method in claim 18, wherein the qualifying of the

        event includes requiring that the event has a preselected thread ID.

21.   (Previously Presented) The method in claim 20, wherein the qualifying of the

        event further includes requiring that the event has a preselected thread CPL.

Claims 22-26 (Cancelled)

27.   (Previously Presented) The method of claim 18, wherein the thread CPL indicates

        a privilege level at which the thread at which the event occurred was operating

        when the event occurred.

28.   (Previously Presented) The method of claim 20, wherein the preselected thread ID

        represents a thread of the plurality of threads where the event occurred.

29.   (Previously Presented) The method of claim 21, wherein thread CPL indicates a

        privilege level at which the thread was operating at when the event occurred.

30.   (Previously Presented) The apparatus of claim 1, wherein the thread CPL

        indicates a privilege level at which the thread at which the event occurred was

        operating when the event occurred.

31.   (Previously Presented) The apparatus of claim 1, further comprising:

        an event counter to count the event qualified by the multiplexer; and

        an access location to allow access to the event counter to determine a current

                count of the event.

32.   (Currently Amended) An system, comprising:

        a storage medium coupled with a processor, the processor to execute a plurality of

                threads simultaneously, each thread including a series of instructions;

        an event detector to detect a predetermined list of events and to transmit an event

                detection signal to a multiplexer;

        an event ~~selection control~~ register ~~(ESCR)~~ to instruct the multiplexer to select an

                event from the predetermined list of events <u>by selecting those events that</u>

are not to be counted and by qualifying the event that is to be counted

based on a set of conditions, wherein the qualifying of the event is

performed using a thread ID and a thread current privilege level (CPL),

the thread ID indicating a source of the event, the source including a

thread of the plurality of threads where the event occurred;

an event counter to count the event qualified by the multiplexer; and

an access location to allow access to the event counter to determine a current

count of the event.

33.   (Currently Amended) The ~~apparatus~~ system of claim 32, wherein the access

location allows access to determine the count without disturbing the operation of

event counter.

34.   (Currently Amended) The system of claim 33, wherein the ~~ESCR~~ event register

comprises a first field of bits to choose the event to be counted.

35.   (Currently Amended) The system of claim 34, wherein the ~~ESCR~~ event register

further comprises a second field of bits to choose the event to be masked and not

counted.

36.   (Previously Presented) The system of claim 32, wherein the event counter is

stopped and cleared before a new event is selected.

37.   (Previously Presented) The system of claim 36, wherein the event counter is

preset to a certain state.

38.   (Previously Presented) The system of claim 32, wherein the predetermined list of

events includes hardware performance and breakpoint events.

39. (Previously Presented) The system of claim 32, wherein the thread CPL indicates a privilege level at which the thread at which the event occurred was operating when the event occurred.

40. (Currently Amended) A machine-readable medium having stored thereon data representing sets of instructions, the sets of instructions which, when executed by a machine, cause the machine to:

execute a plurality of threads simultaneously, each thread including a series of instructions;

detect a predetermined list of events and transmitting an event detection signal to a multiplexer;

instruct the multiplexer to select an event from the predetermined list of events by filtering those events that are not to be counted and by qualifying the event that is to be counted based on a set of conditions, wherein the qualifying of the event is performed using a thread ID and a thread CPL, the thread ID indicating a source of the event, the source including a thread of the plurality of threads where the event occurred;

count the event qualified by the multiplexer using an event counter; and

access the event counter to determine a current count of the event.

41. (Previously Presented) The machine-readable medium of claim 40, wherein the qualifying of the event includes requiring that the event has a preselected thread ID.

42.   (Previously Presented) The machine-readable medium in claim 41, wherein the qualifying of the event further includes requiring that the event has a preselected thread CPL.

43.   (Previously Presented) The machine-readable medium of claim 40, wherein the thread CPL indicates a privilege level at which the thread at which the event occurred was operating when the event occurred.

44.   (Previously Presented) The machine-readable medium of claim 40, wherein the preselected thread ID represents a thread of the plurality of threads where the event occurred.

45.   (Previously Presented) The machine-readable medium of claim 41, wherein thread CPL indicates a privilege level at which the thread was operating at when the event occurred.